

HOLMES RUN/ CHAMBLISS CROSSING Q&A – PUBLIC MEETING #2

May 28, 2009

1. What is the difference between a bridge and low profile crossing?

- A bridge crossing, in order to meet the FIMA flood plain "no rise" regulation, would need to be set above the FIMA regulated flood plain line creating a very large structure. A low profile crossing sets the crossing elevation much closer to the base flow elevation of the stream and therefore is a much smaller structure.

2. At what elevation does a low profile crossing become a bridge here?

- The exact "threshold elevation" between the two crossing types has not been determined yet, but any crossing that causes an increase in the FIMA regulated flood plain is not permissible and therefore, not feasible for this project.

3. You have already done a fair weather crossing downstream. Why do a low profile crossing?

- The low profile crossing allows for much greater accessibility than a fair weather crossing. This is an important component given the transportation-oriented source of funding that is paying for the crossing project. It has also been found that a fair weather crossing has less impact to the aquatic ecosystem.

4. Why locate the low water crossing upstream from the sewer? It will cause flooding due to debris build up.

- We have not determined the final location of the crossing. We will be taking debris build-up as a factor in our design and location.



5. As we move into design of the low profile crossing, will you adjust the elevation based on modeling?

- Yes, the final crossing elevation will be the "optimal" elevation that lowers the potential for debris build up and allows for safe and dry crossing during the majority of the year without causing a rise in the FIMA regulated flood plain.

6. Is the fair weather crossing more accessible than we are saying and allows aquatic life to swim across?

- Existing examples of fair weather crossings along Holmes Run indicate that this type of crossing is not as accessible as a low profile crossing. A fair weather crossing along this part of the stream will be wet during the great majority of the year if not constantly, thereby greatly reducing the accessibility factor. Aquatic life, such as fish have a greater difficulty crossing a fair weather crossing since the slab of the crossing is set directly on the stream bed and only allows a few inches of water to pass over it.

7. Will stabilization of the stream banks be enough to keep a low profile crossing intact?

- The design team will be designing a crossing combined with streambank stabilization and restoration. The combined design will withstand the current and predicted stream flows.

8. Lake Barcroft lets large quantities of water out at once which can damage any crossing.

- This has been noted and will be taken into consideration during the design of the crossing.



9. Is the project stopping at city line?

Yes, the current plans for the stabilization and restoration project boundary is proposed to end at the City line to the north and the Dora Kelly Park line to the south. The project includes along an approximately 350-foot section on both the City side and Fairfax County side of Holmes Run. However, we are working with Fairfax County to explore stabilization upstream of the City limit. Our coordinated effort will ensure that all work done in the stream is complimentary.

10. Is the site of the crossing fixed?

- No. A final crossing location has not yet been determined. The design team will be refining the concept options and will present more detailed plans to the community in mid July.

11. Is there a way to get Lake Barcroft management to regulate their discharge?

- This is not in the scope of this project.

12. Making a physical connection will improve the awareness of the communication issue between Lake Barcroft/Fairfax/Alexandria.

- Noted.

13. How can we have input on the type of crossing?

- The community's input is essential to the success of this project. Members of the community are welcome and encouraged to contact Yon Lambert, the project manager for the City, at: yon.lambert@alexandriava.gov. We will not make major decisions without going back to community.

14. Can you consider a location for the crossing by Hawthorn Street?

- This area is out of the project boundary and not feasible for a desirable crossing.



15. Would we get flood relief if we widen the channel?

- It may be possible, if the cross-sectional area were widened, to potentially lower water surface elevations during storms. For Holmes Run, laying back the channel banks and/or adding a "flood-prone area/bank-full bench" would most likely decrease flood elevations. Greater reductions occur during smaller storms (i.e. the 1, 2, 5, and 10-year storm events). However, during the 100-year storm event (the event that FEMA flood maps are based) the reduction would likely be very insignificant. We will be able to quantify when we have a concept and with hydraulic modeling.

16. The grade elevation along the Fairfax County side of Holmes Run is extremely steep and dangerous. Can you consider moving the crossing north?

- Noted, although we are concerned with moving the crossing location too far into the existing lawn area. We will study this closely and present an updated design by late summer/fall 2009. We will provide regular updates via e-mail prior to the next community meetings.

17. Using only rocks for the stream bank stabilization is not an appropriate solution.

- Noted. Our intent is to combine both "hard" materials such as rocks and concrete with "soft" materials such as plants.

18. The current lawn space is actively used by the neighborhood. Consider its preservations.

- Noted. The intent of the project is to limit the impact to the lawn area.

19. Can we move the crossing to a more private or "wooded" area?

- Moving the crossing into a wooded area would create further environmental impacts.



20. As a cyclist, I'm glad you are not doing a fair weather crossing.

- Noted.

21. When will construction begin and how long will it last?

- Construction would most likely not begin until mid 2010. Construction time frame is unknown at this time and dependent on extent of restoration projects.

22. Is the eroding bank along Holmes Run in the park natural or man-made erosion?

- The erosion is most likely man-made due to the linearity of this section of the stream.

23. The fair weather crossing downstream gets blocked. Will this one do the same?

- The City has been actively maintaining these crossings. If a fair weather crossing is selected for this area, the City will likewise maintain it.

24. There is adjacent evidence that a "hard engineering" solution can look natural.

- Noted. We will be exploring several streambank stabilization/ restoration options that create an optimal solution for this particular project.

25. Will you be looking at sewer smell along the path?

- This is not in the scope of this project.



26. What types of restoration/stabilization techniques will we be looking at?

- The May 30th presentation discussed several options. This presentation is available on the project web site. An updated design will be presented to the community by late summer/fall 2009. We will provide regular updates via email prior to the next community meetings.

27. Are we considering water from drains that flow into the watershed?

Yes, we are considering the volume of stormwater that enters the stream along with the flow that is in the stream in determining our modeling.

28. Can you give ideas of cost at this time?

- At this time we do not have cost estimates for the crossing.

29. Putting the crossing downstream in Dora Kelly is more feasible since it is away from problematic flooding areas.

- This area is outside of the project boundary and is not feasible due to high slopes on the west bank.

30. Why would a fair weather crossing interrupt the stream habitat?

- Stream bed materials are rich with invertebrates, which are at the bottom of the food chain. If you decrease the number of invertebrates by covering up their habitat with a concrete fair weather crossing, this limits their area of existence (limits the population numbers) and causes a chain reaction up the food chain.

31. A fair weather crossing is dangerous for cyclists because of sediment deposits and wet/ slippery conditions.

Noted.



32. Is Holmes Run considered a healthy eco system?

"Healthy" is a relative term. There are on-going studies are looking at the current environmental conditions. Holmes Run is located in a highly urbanized area which means there is a lot of impervious surface. Water is delivered to the streams with high volume and velocity which causes erosion. Many pollutants are delivered to the streams from the impervious areas via the storm drain system. This leads to a shift in organisms populations to those most tolerant of these types of conditions – flashy stream with high concentrations of urban pollutants. This results in a loss of species number and lower populations

33. Will we be required to submit an environment impact statement?

- No, we will submit a nationwide permit which is an implied impact.

34. A fair weather crossing is very limiting in terms of access. The low profile crossing is preferred and building it as low as possible would be better to do away with the need for railing.

- Noted